

Setting method of shape, working stress and using environment of steel member

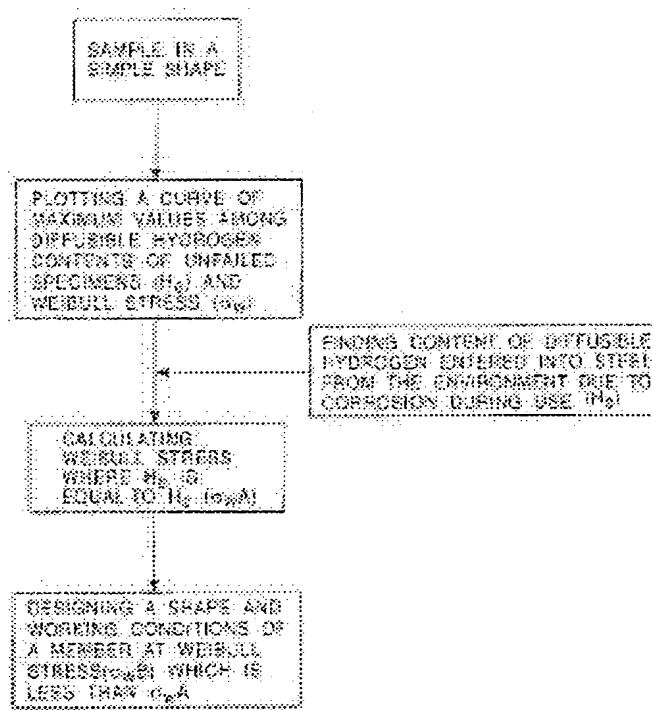
| | | |
|----------------------------|---|---------------------------|
| Patent number: | CN1344932 (A) | Also published as: |
| Publication date: | 2002-04-17 | EP1184657 (A2) |
| Inventor(s): | SHUSAKU TAKAKI [JP]; KANEAKI TSUSAKI [JP]; TADANOBU IUE [JP] | EP1184657 (A3) |
| Applicant(s): | KAWASAKI STEEL CO [JP] | US2002043111 (A1) |
| Classification: | | US6523416 (B2) |
| - international: | G01N1/28; C22C38/04; C22C38/22; G01N3/00; G01N3/08; G01N33/20; G01N1/28; C22C38/04; C22C38/22; G01N3/00; G01N3/08; G01N33/20; (IPC1-7): G01N33/20; G01L1/00 | KR20020018136 (A) |
| - European: | C22C38/04; C22C38/22 | |
| Application number: | CN20011040712 20010831 | |
| Priority number(s): | JP20000264716 20000831 | |

Abstract not available for CN 1344932 (A)

Abstract of correspondent: EP 1184657 (A2)

A delayed fracture in high strength steel is effectively prevented by appropriately setting a shape and working stress, and working environment of a high strength member having more than 1,000 Mpa of tensile strength. To this end, the relationship between a maximum value of diffusible hydrogen contents (Hc) of unfailed specimens and Weibull stress (sigma wA) are found and the content (He) of diffusible hydrogen entering the steel from the environment due to corrosion during the use of the steel member is also found. Then, the value of Weibull stress for the hydrogen content Hc that is equal to the environmental value He is found, thus determining the shape and working stress of the steel member so as to provide stress (sigma wB) below the Weibull stress (sigma wA).

FIG. 1



Data supplied from the **esp@cenet** database — Worldwide